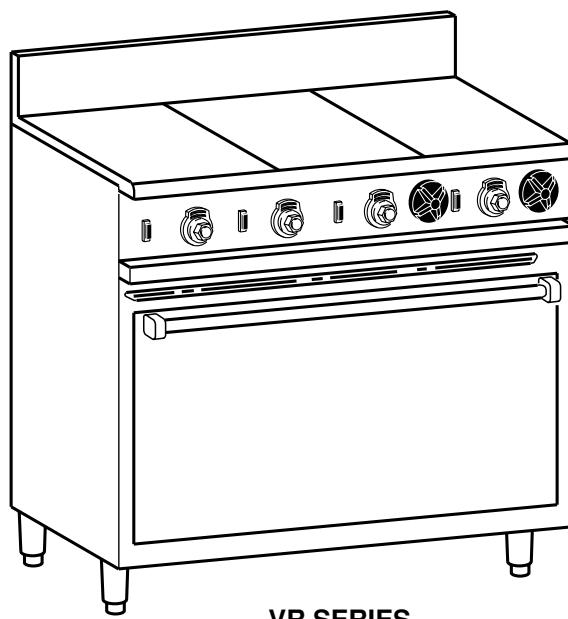


# INSTALLATION AND OPERATION MANUAL FOR ELECTRIC HEAVY DUTY RANGES MODELS VR, VS, VM, VEX, VMX AND VRC



VR SERIES



# **INSTALLATION AND OPERATION MANUAL FOR ELECTRIC RANGES MODELS VR, VS, VM, VEX, VMX AND VRC**

## **INDEX**

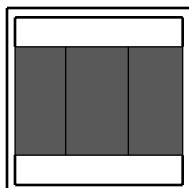
### **SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE**

Vulcan ranges are produced with quality workmanship and material. Proper installation, usage and maintenance of your range will result in many years of satisfactory performance.

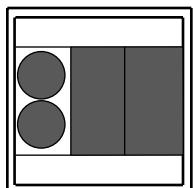
The manufacturer suggests that you thoroughly read this entire manual and carefully follow all of the instructions provided.

<b>DESCRIPTION</b>	<b>PAGE</b>
INDEX	3
VULCAN RANGE CONFIGURATIONS	4
GENERAL	6
INSTALLATION	7
UNPACKING	7
LOCATION	7
BUMPER BAR INSTALLATION	8
LEVELING	8
ELECTRICAL CONNECTIONS	8
OPERATION	11
CONTROLS	11
BEFORE FIRST USE	12
USING THE RANGE TOP	12
USING THE VR SERIES OVEN	13
USING THE VRC SERIES OVEN	13
OPERATING HINTS	14
COOKING TIPS	14
CLEANING	15
CLEANING BLOWER WHEEL	15

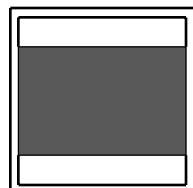
## VULCAN RANGE CONFIGURATIONS



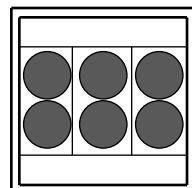
VR1, VR2  
VM1, VM2  
VS1, VS2  
VR1C, VR2C



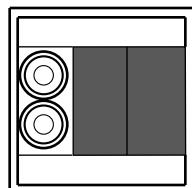
VR3, VR6  
VM3, VM6  
VS3, VS6  
VR3C, VR6C



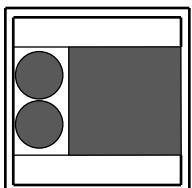
VR5  
VM5  
VS5  
VR5C



VR4  
VM4  
VS4  
VR4C

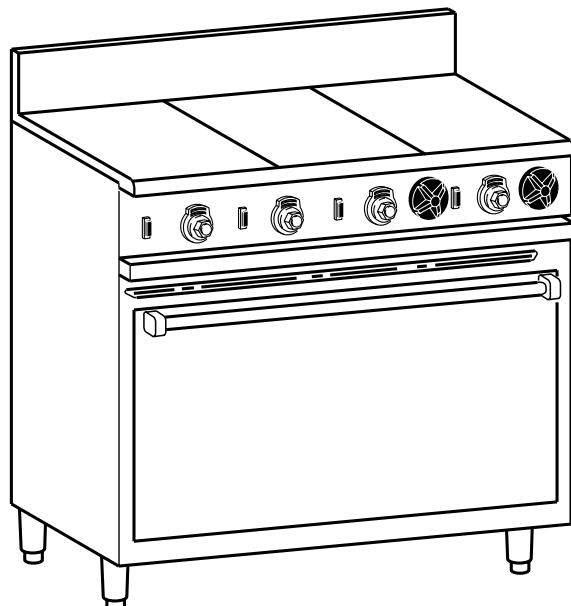


VR3, VR6  
VM3, VM6  
VS3, VS6  
VR3C, VR6C

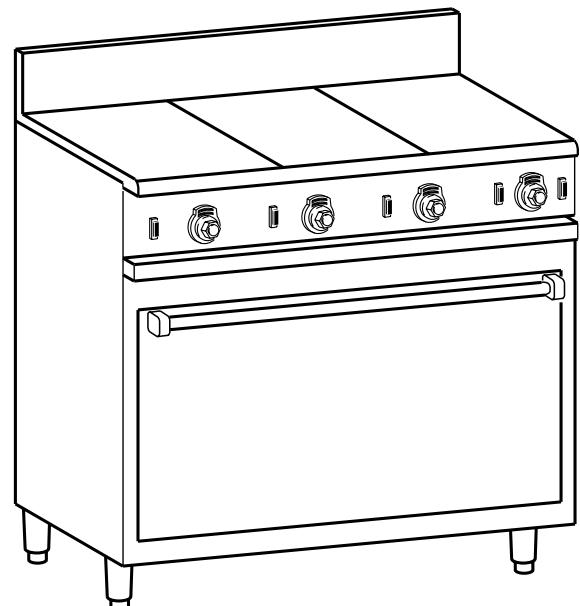


VR7  
VM7  
VS7  
VR7C

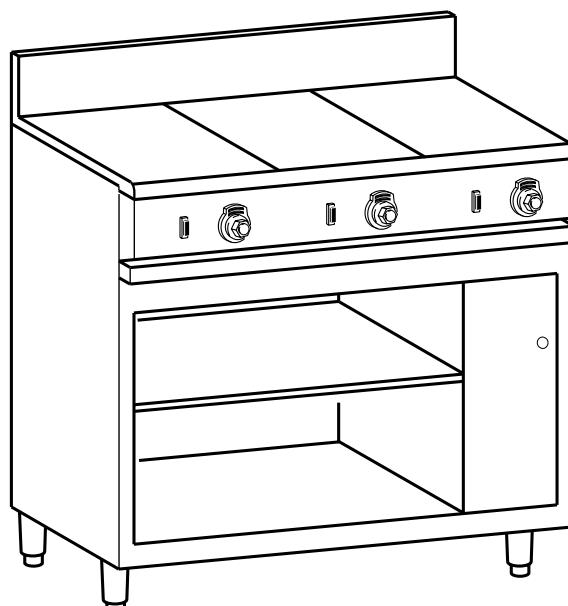
(SHOWN WITH OPTIONAL  
HIGH SPEED ELEMENTS)



VR SERIES



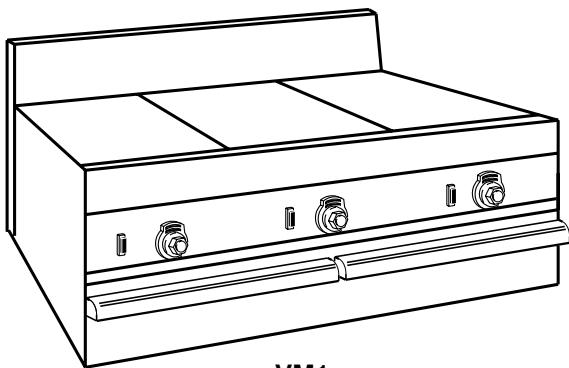
VRC SERIES



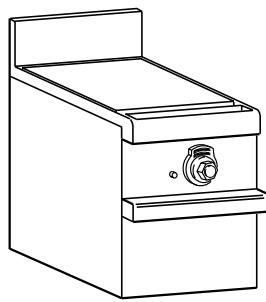
VS SERIES

PL - 51130-1

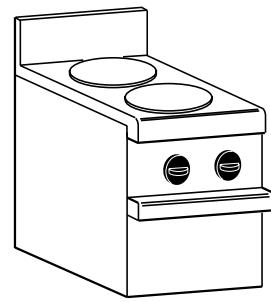
## VULCAN RANGE CONFIGURATIONS



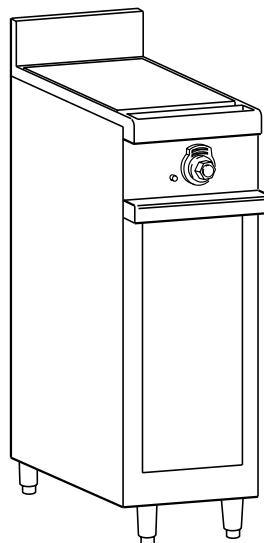
VM1  
VM2



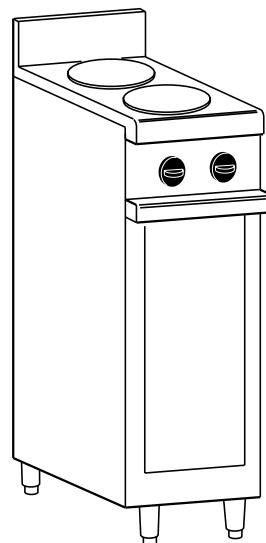
VMX1  
VMX2



VMX3



VEX1  
VEX2



VEX3

PL - 51130-2

# GENERAL

---

The various Vulcan electric VR, VS, VM, VEX and VMX Family Series standard ranges and VRC Series convection ranges are equipped as follows:

MODEL	DESCRIPTION
<b>RANGES WITH STANDARD OVEN</b>	
VR1	(3) 12" x 24" hot tops.
VR2	(3) 12" x 24" all purpose plates, (2) with grease troughs on right and left sides and (1) without grease trough in the center.
VR3	(2) 9½" dia. round French hot plates at left and (2) 12" x 24" hot tops at center and right.
VR4	(6) 9½" dia. round French hot plates.
VR5	36" wide griddle with front grease trough.
VR6	(2) 9½" dia. round French hot plates at left and (2) 12" x 24" all purpose plates at center and right.
VR7	(2) 9½" dia. round French hot plates at left and 24" griddle top at right.
<b>MODULAR RANGES WITHOUT OVEN</b>	
VM1	(3) 12" x 24" hot tops.
VM2	(3) 12" x 24" all purpose plates, (2) with grease troughs on right and left sides and (1) without grease trough in the center.
VM3	(2) 9½" dia. round French hot plates at left and (2) 12" x 24" hot tops at center and right.
VM4	(6) 9½" dia. round French hot plates.
VM5	36" wide griddle with front grease trough.
VM6	(2) 9½" dia. round French hot plates at left and (2) 12" x 24" all purpose plates at center and right.
VM7	(2) 9½" dia. round French hot plates at left and 24" griddle top at right.
<b>12" WIDE FULL BODY EXPANDO RANGES</b>	
VEX1	(1) 12" x 24" hot top.
VEX2	(1) 12" x 24" all purpose plate with side grease troughs.
VEX3	(2) 9½" dia. round French hot plates.
<b>12" WIDE MODULAR EXPANDO RANGE</b>	
VMX1	(1) 12" x 24" hot top.
VMX2	(1) 12" x 24" all purpose plate with side grease troughs.
VMX3	(2) 9½" dia. round French hot plates.
<b>RANGES WITH CONVECTION OVEN</b>	
VR1C	(3) 12" x 24" hot tops.
VR2C	(3) 12" x 24" all purpose plates, (2) with grease troughs on right and left sides and (1) without grease trough in the center.
VR3C	(2) 9½" dia. round French hot plates at left and (2) 12" x 24" hot tops at center and right.
VR4C	(6) 9½" dia. round French hot plates.
VR5C	36" wide griddle with front grease trough.
VR6C	(2) 9½" dia. round French hot plates at left and (2) 12" x 24" all purpose plates at center and right.
VR7C	(2) 9½" dia. round French hot plates at left and 24" griddle top at right.

MODEL	DESCRIPTION
<b>RANGES WITH CABINET BODY</b>	
VS1	(3) 12" x 24" hot tops.
VS2	(3) 12" x 24" all purpose plates, (2) with grease troughs on right and left sides and (1) without grease trough in the center.
VS3	(2) 9½" dia. round French hot plates at left and (2) 12" x 24" hot tops at center and right.
VS4	(6) 9½" dia. round French hot plates.
VS5	36" wide griddle with front grease trough.
VS6	(2) 9½" dia. round French hot plates at left and (2) 12" x 24" all purpose plates at center and right.
VS7	(2) 9½" dia. round French hot plates at left and 24" griddle top at right.

Hot tops and all purpose plates are not recommended for use as griddles.

Optional high speed elements are available in place of round French hot plates for use with 208/240 volts only. The high speed elements are not recommended for stock pot work.

All VR and VRC ranges with oven sections are mounted on 6" adjustable legs. Optionally, they may be equipped with no legs (for masonry base mounting) or a 4" toe base in place of legs.

All VR ranges with ovens are equipped with one oven rack. All VRC ranges with ovens are equipped with 3 oven racks. Additional racks may be purchased as an option.

All VR and VRC ranges with full size ovens, VS cabinet base or VM modular ranges will have two drawers in the front of the range under the cooking top area. The left-hand drawer is a baffled grease drawer, the right-hand drawer is a warming drawer.

## INSTALLATION

---

### UNPACKING

Immediately after unpacking the range, check it for possible shipping damage. If the range is found to be damaged after unpacking, save the packing material and contact the carrier within 15 days of delivery.

Prior to installation, verify that the electrical service agrees with the specifications on the data plate which is located on the breaker cover door to the right of the oven cavity.

### LOCATION

Position the range in its final installation position. Refer to the data plate for required clearances adjacent to combustible and non-combustible construction. When a broiler is installed over the range, refer to the broiler and range data plates for clearance requirements. Install the range so that the conduit can be placed into the bottom entrance.

The VRC Convection Range will require a minimum 4" clearance between a rear wall and motor cover. The convection oven also comes equipped with 9" wide, side bumper bars that must be attached to the range if it is installed next to a combustible wall. Refer to BUMPER BAR INSTALLATION in this manual.

## BUMPER BAR INSTALLATION (RANGES ON CASTERS ONLY)

There are 2 sets of bumper bars packaged separately and placed inside the oven compartment for shipping. Bumper bars must be installed on the side(s) of the convection oven that is placed near a combustible wall during operation.

1. Remove bumper bars from the oven cavity and unwrap.
2. Using a  $\frac{5}{16}$ " socket and socket driver, attach bumper bar to the side(s) of the oven nearest the combustible wall. Note that there are predrilled bumper bar mounting holes supplied on the sides and back of the oven (Fig. 1).



Fig. 1

## LEVELING

### Full Body Ranges

Using a carpenter's level placed on top of the range, adjust the feet so the range is level from front to back and from side to side.

### Masonry Base/Toe Base

Using a carpenter's level, ensure that the base where the range will be installed is level. If the base is not level, it must be levelled before installing the range.

## ELECTRICAL CONNECTIONS

**WARNING:** ELECTRICAL AND GROUNDING CONNECTIONS MUST COMPLY WITH THE APPLICABLE PORTIONS OF THE NATIONAL ELECTRICAL CODE AND/OR OTHER LOCAL ELECTRICAL CODES.

**WARNING:** DISCONNECT ELECTRICAL POWER SUPPLY AND PLACE A TAG AT THE DISCONNECT SWITCH TO INDICATE THAT YOU ARE WORKING ON THE CIRCUIT.

Bring conduit containing the proper supply wire (size and type in accordance with latest edition of the National Electrical Code ANSI/NFPA-70) to the range through the 2" hole located in the bottom of the range. On modular ranges and expando units, the conduit enters the range through the clearance hole located in the back of the range. Use wire suitable for 75°C on ranges carrying more than 80 amps.

Connect the supply leads to the terminal block and the green grounding lead to the labeled ground lug.

## ELECTRICAL DATA CHARTS

### VR RANGES WITH STANDARD OVENS OR VS RANGES WITH CABINET BODY

"N/A" RANGES NOT AVAILABLE 480 VOLT

MODEL	TOTAL KW	3 PHASE LOAD KW PER PHASE			NOMINAL AMPS PER LINE WIRE													
					3 PHASE						1 PHASE							
		208V	240V	480V	208V			240V			480V			208V	240V	480V		
CONN.	X-Y	Y-Z	X-Z	X	Y	Z	X	Y	Z	X	Y	Z	X	Y	Z	XYZ	XYZ	XYZ
VR1,2,5	21.7	7.7	5	9	70	53	58	60	46	51	30	23	25	104	90	45		
VR1,2,5 / VB73	27.7	10.7	8	—	82	78	71	71	68	61	—	—	—	133	115	—		
VS,VM1,2,5	15	5	5	5	42	42	42	36	36	36	18	18	18	72	63	31		
VS,VM1,2,5 / VB73	21	8	8	—	54	67	54	47	58	47	—	—	—	101	88	—		
VR3,6,7	20.7	7.7	5	8	65	53	54	57	46	47	28	23	24	99	86	43		
VR3,6,7 / VB73	26.7	10.7	8	—	78	78	67	68	68	58	—	—	—	128	111	—		
VS,VM3,6,7	14	5	5	4	38	42	38	33	36	33	16	18	16	67	58	29		
VS,VM3,6,7 / VB73	20	8	8	—	50	67	50	43	58	43	—	—	—	96	83	—		
VR4	18.7	6.7	4	8	61	45	50	53	39	43	19	27	22	90	78	39		
VR4 / VB73	24.7	9.7	7	8	74	70	63	64	60	54	27	30	33	119	103	N/A		
VS,VM4	12	4	4	4	33	33	33	29	29	29	14	14	14	58	50	25		
VS,VM4 / VB73	18	7	7	—	46	58	46	40	51	40	—	—	—	87	75	—		
<b>480 Volt Only:</b>																		
VR1,2,5 / VB73	21.7	7.7	11	9	—	—	—	—	—	—	30	34	36	—	—	N/A		
VR3,6,7 / VB73	26.7	7.7	11	8	—	—	—	—	—	—	28	34	34	—	—	N/A		
VS,VM1,2,5 / VB73	21	5	11	5	—	—	—	—	—	—	18	29	29	—	—	44		
VS,VM3,6,7 / VB73	20	5	11	4	—	—	—	—	—	—	16	29	27	—	—	42		
VR4 / VB73	24.7	6.7	10	8	—	—	—	—	—	—	27	30	33	—	—	N/A		
VS,VM4 / VB73	18	4	10	4	—	—	—	—	—	—	14	25	25	—	—	38		

### VR RANGES WITH CONVECTION OVENS

MODEL	TOTAL KW	3 PHASE LOAD KW PER PHASE			NOMINAL AMPS PER LINE WIRE													
					3 PHASE						1 PHASE							
		208V,240V & 480V			208V			240V			480V			208V	240V			
CONN.	X-Y	Y-Z	X-Z	X	Y	Z	X	Y	Z	X	Y	Z	X	Y	Z	XYZ	XYZ	XYZ
VR1C,2C,5C	22	6.2	6.2	9.6	66	51	66	57	45	57	29	22	29	106	92			
VR1C,2C,5C/VB73	28	9.2	9.2	9.6	78	76	78	68	66	68	34	33	34	135	117			
VR3C,6C,7C	21	6.2	6.2	8.6	62	51	62	54	45	54	27	22	27	101	87			
VR3C,6C,7C/VB73	27	9.2	9.2	8.6	74	76	74	64	66	64	32	33	32	130	112			
VR4C	19	5.2	5.2	8.6	58	43	58	50	37	50	25	19	25	91	79			
VR4C/VB73	25	8.2	8.2	8.6	70	68	70	61	59	61	30	29	30	120	104			

### VEX AND VMX RANGES

MODEL	TOTAL KW	3 PHASE LOAD KW PER PHASE			NOMINAL AMPS PER LINE WIRE													
					3 PHASE						1 PHASE							
		208V   240V   480V			208V			240V			480V			208V	240V	480V		
CONN.	X-Y	Y-Z	X-Z	X	Y	Z	X	Y	Z	X	Y	Z	X	Y	Z	XYZ	XYZ	XYZ
VEX,VMX1	5	2.5	2.5	—	11	21	11	9	18	9	4.5	9.0	4.5	24	21	10.4		
VEX2,VMX2	5	—	—	—	—	—	—	—	—	—	—	—	—	24	21	10.4		
VEX3,VMX3	4	2	2	—	8	17	8	7	14	7	3.6	7.2	3.6	19	17	8.3		

"VB73" in above charts denotes an electric elevated broiler installed over the range.

## 220/380, 240/415 VOLT VS/VM RANGES AND VR RANGES WITH OVEN

MODEL	TOTAL KW CONN.	3 PHASE LOAD KW PER PHASE			NOMINAL AMPS PER LINE WIRE				
					240/415 VOLT				
					3 PHASE			1 PHASE	
X-N	Y-N	Z-N	X	Y	Z	X	Z		
VR1,2,5	21.7	7.7	5	9	32	21	38	32	58
VR1,2,5 / VB73	27.7	10.7	8	9	45	33	38	45	71
VS,VM1,2,5	15	5	5	5	21	21	21	21	42
VS,VM1,2,5 / VB73	21	8	8	5	33	33	21	33	54
VR3,6,7	20.7	6.7	5	9	28	31	38	28	59
VR3,6,7 / VB73	26.7	9.7	8	9	41	33	38	41	71
VS,VM3,6,7	14	4	5	5	17	21	21	17	42
VS,VM3,6,7 / VB73	20	7	8	5	29	33	21	29	54
VR4	18.7	6.7	4	8	28	17	33	28	50
VR4 / VB73	24.7	9.7	7	8	41	29	33	41	62
VS,VM4	12	4	4	4	17	17	17	17	34
VS,VM4 / VB73	18	7	7	4	29	29	17	29	46

VOLTAGE FROM ANY PHASE TO NEUTRAL NOT TO EXCEED 250 VOLTS

## 220/380, 240/415 VOLT VRC RANGES WITH CONVECTION OVEN

MODEL	TOTAL KW CONN.	3 PHASE LOAD KW PER PHASE			NOMINAL AMPS PER LINE WIRE							
					3 PHASE			240/415V			1 PHASE	
		X-N	Y-N	Z-N	X	Y	Z	X	Y	Z		
VR1C,2C,5C	22	6.2	6.2	9.6	33	25	33	34	26	34	34	60
VR1C,2C,5C/VB73	28	9.2	9.2	9.6	40	38	40	41	39	41	41	80
VR3C,6C,7C	21	6.2	6.2	8.6	31	23	33	32	24	34	32	58
VR3C,6C,7C/VB73	27	9.2	9.2	8.6	37	35	38	38	37	39	38	76
VR4C	19	5.2	5.2	8.6	31	21	33	32	22	34	32	56
VR4C/VB73	25	8.2	8.2	8.6	37	33	38	38	34	39	38	73

VOLTAGE FROM ANY PHASE TO NEUTRAL NOT TO EXCEED 250 VOLTS

## 220/380, 240/415 VOLT VEX AND VMX RANGES WITHOUT OVEN

MODEL	TOTAL KW CONN.		NOMINAL AMPS PER LINE WIRE						LOAD KW/PHASE			
			1PH,3-WIRE		2-WIRE		1PH,3-WIRE		2-WIRE			
			220/380		220		240/415		240		1 PHASE	
MODEL	220/380	240/415	L1	L2	L1	L2	L1	L2	L1	L2	L1-N	L2-N
VEX,VMX1	4.2	5	9.6	9.6	19.3	10.5	24	21	2.5	2.5		
VEX2,VMX2	4.2	5	19.3	—	19.3	21	—	21	—	—		
VEX3,VMX3	3.4	4	7.8	7.8	15.6	8.5	19	17	2.0	2.0		

"VB73" in above charts denotes an electric elevated broiler installed over the range.

# OPERATION

---

**WARNING:** THE RANGE AND ITS PARTS ARE HOT. USE CARE WHEN OPERATING, SERVICING AND CLEANING THE RANGE.

**WARNING (CONVECTION OVEN MODELS ONLY):** WHEN USING CONVECTION OVENS, DO NOT STAND DIRECTLY IN FRONT OF OVEN WHILE OPENING DOOR. ALTHOUGH OPENING OVEN DOOR WILL AUTOMATICALLY SHUT OFF THE FAN, SOME HEAT ESCAPES. STEP AWAY TO AVOID HOT AIR.

## CONTROLS

### Top Surface Elements

**CAUTION:** Do not continuously operate surface units at maximum temperature; maximum temperature operation will be required only during peak cooking intervals. Reduce heat during slow cooking periods to save energy and prolong the life of the heating elements and castings.

**Element Switches** — control and maintain heat to surface elements.

**Element Indicator Lights** — when lit, indicates power is being supplied to the element.

There are 3 different types of plates that may be used in the VR, VS, VRC, VM, VEX and VMX Ranges.

PLATE & SIZE	USED IN MODELS	CONTROLS	TEMP. RANGE
Hot Top 12" X 24"	VR1,VR3,VM1, VM3,VMT1,VMT3, VEX1,VEX3,VMX1, VMX3,VR1C,VR3C, VS1,VS3	3-heat switch provides control of a single element rated at 5 KW.	340 to 800°F
All Purpose Top 12" X 24" with/without trough	VR2,VR6,VM2, VM6,VTM2,VTM6, VEX2,VEX6,VMX2, VMX6,VR2C,VR6C, VS2,VS6	Thermostat provides control of a single element rated at 5 KW. Indicator light (next to thermostat) is ON when thermostat calls for heat and goes OFF when desired temperature is reached.	340 to 800°F
9½" Dia. French Hot Plates (or Optional Hi-Speed Elements)	VR3,VR4,VR6,VR7 VM3,VM4,VM6 VTM3,VTM4,VTM6, VEX3,VEX4,VEX6 VR3C,VR4C,VR6C, VS3,VS4,VS6	Infinite switch (3-heat switch in 480 V. models) provides (according to its setting) a varying percent (about 7-100%) of its total input to the elements. Rated at 2 KW.	*
Griddle Top 36"	VR5,VM5,VS5, VR5C	(3) thermostats control heat to (3) individual elements rated at 5 KW each. Each thermostat has its own indicator cycling light.	175-550°F
Griddle Top 24"	VR7,VM7,VS7, VR7C	(2) thermostats control heat to (2) individual elements rated at 5 KW each. Each thermostat has its own indicator cycling light. (2) infinite switches rated at 2 KW each.	175-550°F *

\*The 9½" dia. French plates have separate thermostats built into each energy saving plate. With the thermostat dial set at the highest available temperature and pan or pot containing food placed on the plate, the plate will deliver 2,000 watts at a temperature lower than 800°F. When the cooking utensil is removed or its contents have boiled dry, the heating watts are lowered as the temperature rises. Example: When the plate reaches from 820°F to 850°F, wattage is cut back to 950 watts, a 52.5% reduction.

## **Oven Controls**

**Thermostat** — (located on the right side of the switch panel) controls and maintains oven temperature around the desired set temperature. Temperature range of the oven is from 175°F to 550°F.

**VRC Oven ON-OFF Switch (Convection Oven)** — a rocker-type switch that works in conjunction with the electric supply of the thermostat and heating elements operating the oven. This switch must be in the ON position for the oven to operate.

**3-Heat Switch (VR Ranges with Standard Ovens Only)** — There is one 3-heat switch located to either side of the oven thermostat dial. The left switch controls the rate of temperature build-up for the 2700 total watts of the inner and outer top oven elements, and the right switch controls the heating build-up of the 4000 total watts of the inner and outer bottom oven elements. At HI power, both elements (top and bottom) are at maximum output. At MED power, the inner elements (top and bottom) are at half power. At LO power, the inner and outer elements (top and bottom) are heating in series at about one-quarter power.

**Oven Indicator Light** — (located next to the thermostat) when lit, indicates the thermostat is calling for heat and when OFF, indicates the desired temperature is reached.

## **BEFORE FIRST USE**

Clean off the rust preventive compound on the surface units with a cloth dampened with a grease solvent. Wipe with a clean, damp cloth, then dry thoroughly.

### **Seasoning**

The cast iron surface plates must be seasoned. To do this, grease top, then turn element switches to LO (or thermostat to 300°F) and allow plates to heat up gradually for about 2 hours. Repeat this procedure a second time before regular use. Seasoning the surface plates will deter cracking of the cast iron and ensure a longer life.

## **USING THE RANGE TOP**

Use the high setting for bulk cooking jobs or to bring food quickly up to its cooking temperature, then reduce to the actual cooking temperature. During slow cooking periods, reduce plate temperature to idle around 200°F (or set 3-heat switch to MED).

### **12" x 24" Hot Top**

Each hot top section has an independent control allowing adjustment to HI-MED-LO temperature settings. The hot top surface is best suited for stock pot work.

When ready to use the hot top section, wipe the surface clean of all grease and food particles. Position utensils so that as much of the hot top section area as possible is covered. Set control at desired dial setting.

### **12" x 24" All Purpose Top**

Each all purpose top section is independently operated by a separate thermostat allowing a variety of temperature settings for sauteing, braising, pan frying and skillet work.

When ready to use the all purpose top section, wipe the surface clean of all grease and food particles. Position utensils so that as much of the hot top section area as possible is covered. Set control at desired dial setting.

## **French Hot Plate**

French hot plates are designed for bulk cooking and stock pot work (up to 20 Qt. stock pots or 9-10" dia. pans). Stock pots of over 5-gallon capacity are not recommended for continuous use on French hot plate sections. 208/240 volt units are controlled by infinite heat switches. 480 volt models are controlled by 3-heat switches.

## **Optional High-Speed Units**

High-speed units furnished in lieu of French hot plates on 208 and 240 volt models are controlled by infinite switches.

## **Griddle**

Use for general griddling (hamburgers, eggs, pancakes, minute steaks, etc.) If using for the first time, griddle must be seasoned (see BEFORE FIRST USE in this manual).

To use, set dial at desired temperature and allow griddle to preheat (about 7 minutes to reach 350°F). Indicator light will go off when preset temperature is reached. Then load and cook according to recipe, turning foods halfway through cooking time (unless recipe specifies otherwise).

Each 12" section of the griddle has its own thermostatically controlled heat zone and indicator light. This permits simultaneous cooking of different foods at different temperatures (such as eggs, 300°F; and bacon, 350°F); or using the entire griddle top at the same temperature; or using only one or two sections during off-peak periods for economical operation.

## **USING THE VR SERIES OVEN**

When baking or roasting on one level only, remove rack and place food pans directly on oven deck. When using rack and deck at the same time, rotate foods halfway through cooking cycle. When baking on the rack, it may be necessary to set the bottom 3-heat switch at HI.

Preheat oven. Set top and bottom 3-heat switches to HI and thermostat to desired baking temperature. Keep oven door closed during preheating. While waiting for the oven to preheat, load food products into pans.

When set temperature is reached, allow oven signal light to go on and off at least twice so the oven is thoroughly heated and will brown baked products evenly. Set 3-heat switches at desired setting. Load oven as quickly as possible to reduce heat loss from open door. Place pans in center of rack and close door. Do not load small pans closer than 3" from door. Do not let pans touch the sides or back of the oven or each other.

When cooking is completed, open oven door and unload product. After oven cools, wipe up any spills as quickly as possible to prevent them from becoming stubborn stains.

## **USING THE VRC SERIES OVEN**

The convection oven operates like the standard VR oven except that it is controlled by an ON-OFF rocker switch instead of 3-heat switches. The ON-OFF switch must be in the ON position for the oven to operate. In addition, cooking times are generally reduced by 5-10 minutes and the cooking temperature is usually about 25°F lower than standard recipes will indicate.

Best results will normally be achieved by using rack positions 1, 3 and 5 for sheet pan cooking, or rack positions 2 and 4 for larger food products. Further time, temperature and rack adjustments may be required, depending upon your particular product and cooking load.

To operate the convection oven, arrange oven racks as required, turn the power switch to ON and set the thermostat dial to the desired temperature setting. Allow the oven indicator light to cycle on and off at least twice to ensure that the oven has reached the preset cooking temperature. Load product as quickly as possible. Place pans on center of racks.

After cooking is completed, open oven door and unload product. After oven cools, wipe up any spills as quickly as possible to prevent them from becoming stubborn stains.

## **OPERATING HINTS**

Preheat the oven and surface units to cooking temperature before cooking the product. Become familiar with the function of the controls and the area of their operation.

Avoid excessive door opening. Also avoid direct air current on the oven.

Use flat-bottomed, straight-sided pots and pans.

Use covers for stock pot work. Water will boil much sooner and much less heat is required for cooking in a covered container.

Turn high speed elements off a few minutes before cooking is completed to use the heat stored in the element.

After each cooking load, scrape excess food and fat particles off the griddle surface, using a flexible spatula or wire brush.

## **COOKING TIPS**

### **VR Oven**

While it is recommended that the 3-heat switches be set to the HI position in order to preheat the oven to the desired temperature, it is necessary for some baking products to turn the 3-heat switch controlling the top elements to the MED or LO position in order to reduce the amount of radiant heat applied to the product so that the top portion of the product will not be burned.

Uneven cooking may be prevented by different settings for the top and bottom oven 3-heat switches. The amount of heat applied to a product inside the oven is affected not only by the setting of the thermostat and 3-heat switches, but also by its position inside the oven and the frequency of opening and closing the oven door.

Meat roasting is best performed in a balanced oven; 3-heat switch positions of HI and HI are suggested, with the thermostat setting at the low temperature recommended by the American Meat Institute and the Department of Agriculture. Top heat results in a well colored or caramelized finish to meats. When roasting fowl and a heavily browned appearance is not desired, set the top 3-heat switch at MED or LO. It is recommended that a meat thermometer be used for all meat roasting operations.

### **Range Top**

Typical cooking operations require quick changes from high to low heats. With versatile Vulcan range tops, you can maintain different sections at different temperatures and just shift utensils from one section to another when you wish to change the speed of cooking.

## **CLEANING**

**WARNING: DISCONNECT ELECTRICAL POWER SUPPLY BEFORE CLEANING.**

### **Daily (Or As Necessary)**

1. Empty and clean grease drains and troughs. Do not line trays or trough with heat reflecting foil.
2. While still warm, wipe surface tops with a cloth or other grease absorbing material (or scrape if necessary) to remove spillover, grease, etc., before they burn in. A crust on top of the range will interfere with the cooking capabilities of the range.
3. Keep oven areas clean to prevent smoking. Clean off all food or grease spillovers. Use an enamel cleaner or damp cloth. Rub stubborn spots lightly with steel wool.
4. Clean stainless steel oven front and parts with a damp cloth. Stubborn soils may be removed with a detergent. Rinse thoroughly and dry with a soft clean cloth. Never use abrasive cleaners, scrapers or steel wool on stainless steel parts.
5. Painted surfaces of the range may be cleaned with a damp cloth and mild non-abrasive detergent. Thoroughly rinse and wipe dry with a soft clean cloth.
6. Always reseason top casting after cleaning the range area. Refer to SEASONING under the BEFORE FIRST USE section of this manual.

### **CLEANING BLOWER WHEEL (Convection Oven Only)**

Occasional cleaning of the convection oven blower wheel may be necessary. With the oven cavity cool to the touch, open the oven door and remove the oven racks. Locate and remove (4)  $\frac{7}{16}$ " nuts holding the stainless steel cover to the oven interior back. Pull the cover from the oven. Clean the fan wheel with a wire brush.